

Riverlink News

Winter 2005
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Newsletter of the Riverlink network of horticultural research centres in Sunraysia-Riverland.

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New wine grape members on Riverlink Council

The Riverlink Council welcomes two new industry members - Michael De Palma, Chairman of Murray Valley Winegrowers' Inc, and Richard Dolan, Chairman of the Riverland Wine Growers Association. Michael and Richard will represent the regional wine grape industry on Council, revolving their representation to provide a balanced input from both the Sunraysia and Riverland regions.

The Riverlink Council comprises representatives from Sunraysia-Riverland horticulture industries and the four member horticultural research agencies. The Council plays an integral role in providing direction for Riverlink.

Drip book for citrus growers released

NSW Department of Primary Industries (DPI) and the Murray Valley Citrus Board will shortly release a new book detailing best practice drip irrigation for citrus growers.

Edited by NSW DPI Dareton Irrigation Officer Jeremy Giddings,



NSW DPI Irrigation Officer Jeremy Giddings is editor of the new 'Drip Irrigation - a Citrus Grower's Guide' to be released shortly



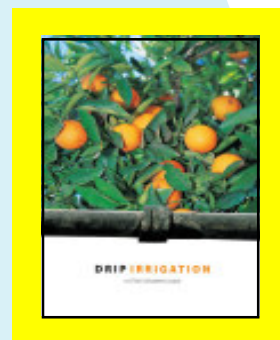
Chairman of the Riverland Winegrape Growers Association, Richard Dolan (left), and Michael De Palma, Chairman of the Murray Valley Winegrowers' Inc are two new members on the Riverlink Council.

With the addition of Michael and Richard, industry representation on Riverlink Council now includes:

Kevin Cock (Chair) - *Citrus Industry*
Graham Robertson (Outgoing Chair)
Peter Jones - *Dried Fruits Industry*
Kevin Pfeiffer OAM - *Wineries*
David Crawford - *Nut Industry*
Roger Schmitke - *Vegetable Industry*
Richard Dolan/Michael De Palma (alternating) - *Wine Grape Industry*

'Drip Irrigation - a Citrus Grower's Guide' combines the expertise of advisors, researchers, designers and farmers from the citrus industry in Sunraysia. The guide covers topics such as: water quality; designing drip systems; irrigation scheduling; fertigation; soil management; and the economics of drip irrigation. Case studies in the book range from citrus drip pioneers to recent adopters.

'Drip Irrigation - a Citrus Grower's Guide' will be available from the Murray Valley Citrus Board on 03 50510500 or the NSW DPI book store on toll free 1800 028 374.



Did you know....

Staff within the Riverlink network are currently working on more than 100 horticultural research and extension projects.

New manual for organic grape growers

DPI-Mildura researcher David Madge is currently applying the finishing touches to a new manual for Australian organic grape growers.

Aimed at providing practical information on organic grape production to comply with Australian Organic Standards, the manual will include sections on: soil and water management; pest, disease and weed control; general vineyard practices; and environmental management.

According to David the manual fills an information gap within the Australian organic grape industry.

‘We have more than 90 organic grape growers across Australia, and this number is growing gradually as more and more people become interested in sustainable farming.

In the past, a lot of the advice we gave growers on managing organic vineyards came from overseas experience. This manual will provide our growers with management information that is relevant to Australian conditions and assist them to meet Australian Organic Standards.’

Information in the manual has been derived from vineyard inspections and interviews with growers in NSW, SA, Victoria and Tasmania, and research results from Australia and overseas.

The manual will be available shortly on the DPI website (free download - see address below) and in hard copy and CD ROM format.

www.dpi.vic.gov.au



DPI researcher David Madge will shortly release a new manual for organic grape production in Australia.

Existing AgNotes on organic grape production can also be found on the DPI website by following these links:

**Agriculture and Food>General Farming
>Organic Agriculture**

David has worked on organics projects within DPI since 1989, and has had a life-long passion for sustainable agriculture.

Further information on the manual is available from David on 03 50514500 or david.madge@dpi.vic.gov.au

New Riverlink Program Leader Tree Crops

Michael Rettke, Senior Research Scientist (Horticulture) based at the SARDI Plant Research Centre in Adelaide, was recently appointed as Riverlink’s new Program Leader for Tree Crops.



Michael is also program leader for SARDI’s Postharvest and Summerfruits groups, and has worked in research for more than 14 years. Michael spent his first six years with SARDI at the Loxton Research Centre, working with the stone fruit industry - particularly dried apricots. He continues to maintain close contact with the Riverland in his current work.

The Riverlink network is:

-  CSIRO Plant Industry Merbein
-  NSW Department of Primary Industries Dareton
-  Department of Primary Industries Mildura
-  Primary Industries & Resources South Australia Loxton Research Centre

Did you know...

There are more than 150 research and support staff working within the Riverlink network in Sunraysia-Riverland

Innovation the key for Australian wine

In a recent interview on his return to Spain, Javier Tardaguila (Associate Professor of Viticulture at the University of Rioja) acknowledged the Australian wine industry's commitment to innovation as its key to success in the global market.

'Sometimes tradition is a burden that prevents us (in Spain) from being dynamic.'

These words epitomise the reaction of Professor Javier Tardaguila to his study of the Australian wine industry. Based at DPI-Mildura, Professor Tardaguila immersed himself in all aspects of the Australian wine industry - focussing particularly on research - for a six month period from October 2004 to April 2005.



Associate Professor of Viticulture from the University of Rioja Spain, Javier Tardaguila, believes that Australia's commitment to innovation is the key to its successful wine industry.

'Today the scientific epicentre of global viticulture research is not in France or the USA, but there in Australia. Australia is a country that takes the application of research, technological development and innovation very seriously.'

Professor Tardaguila commended the Australian wine industry's support of research and the development of scientists specialising in aspects of viticultural production such as irrigation, and pruning techniques. He stressed that this was a key ingredient to the success of the industry, along with its great capacity for innovation.

'They do not assume that things will always be the same, as can happen here in Europe...'

Based on translation of an article from La Rioja newspaper 29 May 2005.

Note - La Rioja newspaper also recently ran an article titled 'The Australian Wine Revolution.' Spanish interest in Australian viticulture has also resulted in a workshop on the Australian wine industry for growers and researchers in the La Rioja region.Ed.

Action on Downy Mildew threat

A Downy Mildew Action Committee has been formed in the Riverland to address fears that Australian shortages of, and possible resistance to, some key fungicides could leave grape growers or crops open to disease.

Historically, weather events triggering downy mildew infection have occurred approximately every nine seasons. It is now twelve years since the last major downy mildew outbreak, causing concern for regional grape growers and researchers who feel that an epidemic is overdue.



Julie Sippo from the Riverland Wine Industry Development Committee is part of the Downy Mildew Action Committee

The Downy Mildew Action Committee involves members from: SARDI Loxton Research Centre, Riverland winegrape industries, the Bureau of Meteorology, and the chemical industry. Amongst its many activities, the committee is contemplating organisation of a national Downy Mildew summit.

Exciting Science Challenge hits Sunraysia

The Science and Engineering Challenge is a program developed by the University of Newcastle, which aims to encourage junior students to study science at senior and tertiary levels.

Irymple Rotary Club, Riverlink and La Trobe University Mildura have this year sponsored the first Science and Engineering Challenge in Sunraysia, held in Mildura on Tuesday 21 June at the St Joseph's Stadium.



Students from the winning school, Irymple Secondary College, accept their Challenge trophies from Riverlink Chairman Kevin Cock (left) and Professor David Finlay from La Trobe University

The inaugural Mildura Challenge involved seven schools, with a total of 110 students participating in eight fun science-related challenges such as constructing aircraft, bridge building, code cracking and developing an electricity network. The winning school team, Irymple Secondary College, now has the chance to attend the 'Super Challenge' to be held in Melbourne during August.

As a regional scientific research network, Riverlink's commitment to the Challenge goes hand in hand with a desire to encourage interest in science careers. Riverlink's new Chairman Kevin Cock clearly made this point on the day, telling participating students that *'you do not need to go to NASA to find exciting science careers - they are right here in your own backyards!'*

Horticulture Quiz:

Last Edition - Who Am I?

Thanks to all those who responded to the quiz on the father of horticultural science in our last edition. The answer was...Thomas Andrew Knight. Congratulations to Adrian Rakimov (new PhD student located at DPI-Mildura) who had the first correct answer.

This Edition - Who Am I?

The quiz in this edition involves someone a little closer to home...

I am a Riverlink scientist and have lived in Mildura for eight years. I have a couple of degrees from a southern university and am presently studying for a Masters in Business Administration.

My interest is in plant water relations and biochemistry and I don't mind a drop of good wine. One day I would like to own my own farm or work for an aid organisation.

If you think you know who I am, email your answer to merryl.whyte@dpi.vic.gov.au for your chance to win a mystery prize.

First correct answer wins.

Have you visited the Riverlink web site lately?



www.sardi.sa.gov.au/riverlink/riverlink.htm

Diary Dates

La Trobe University 14 August 2005

Mildura Open Day

Contact: Ron Broadhead 03 50514000

Riverlink Winegrape 7 September 2005

Industry R & D

Planning Forum

Contact: Merryl Whyte 03 50514569

Riverlink.PRN Seminar 16 September 2005

'Thesis Writing - Part Two'

Contact: Dr Aldo Poiani 03 50514000

Riverland Field Days 14 & 15 Sept 2005

Contact: Dafni Polymaidis 08 85959100

(PIRSA site coordinator)

Regional Roundup

Updates from the Riverlink research centres

PIRSA/SARDI Loxton Research Centre T 08 85959100

Release of SARDI fan sprayer for citrus

SARDI researcher Geoff Furness is elated to see his hard work and perseverance pay off with the release of the first commercial citrus sprayer to use SARDI fan technology.

SARDI and Croplands have announced the development of the Croplands Quantum Mist sprayer to suit citrus orchards. The first commercial unit has been built for a grower in Nangiloc.

The latest model has greater flexibility for high volume spraying as well as low volume spraying. It also reduces spraying costs, improves efficiency, and reduces power requirements and spray volumes.

Spray units incorporating SARDI fan technology were originally designed for viticulture. Over 3,000 fans have been sold in the past 18 months, and a thriving export industry has been developed to countries such as NZ, USA and Brazil.



The new Croplands Quantum Mist sprayer for citrus uses SARDI fan technology

The use of the distance based, canopy size calibration together with improved sprayer set up in the new technology has brought about significant improvements in pest and disease control. Orlando Wyndham have adopted the new technology and report “the incidence of powdery mildew on grapes delivered to all wineries nationally has fallen from an average of 10% to less than 3% - resulting in savings of millions of dollars per year.”

CropWatch Online Released

www.cropwatchonline.com

Staff at the Loxton Research Centre have had input into development of a new web-based service for Riverland wine grape growers called CropWatch Online. Developed by the Riverland Wine Industry Development Committee, the service was launched on 28 April by the Hon. Karlene Maywald Minister for Science SA.

CropWatch Online enables growers to access up-to-date information on local weather conditions, and forecasts/alerts for pest and disease incidence - such as downy mildew.

Combined with other monitoring, CropWatch Online can help growers make informed and timely decisions. The web site provides an easy to use resource for local industry news, and information on disease and pest identification and control. The Horticulture Hotline service to Murray Valley growers will also be included.

DPI-Mildura

T 03 50514500

Maturity Standards for Table Grapes

The Sunraysia Table Grape Growers Association are examining reintroduction of maturity standards for table grape production, responding to consumer complaints about marketing of immature fruit. This approach is based on experiences in Western Australia, where the reintroduction of a maturity standard has virtually eliminated sour fruit complaints.



DPI-Mildura researchers Kristen Pitt and Rosie Hannah ran a recent workshop to help develop maturity standards for the table grape industry.

Two sensory evaluation workshops were run by DPI-Mildura staff this season to help develop maturity standards. These workshops evaluated what consumers considered acceptable for the Thompson Seedless and Crimson Seedless table grape varieties. Grapes of both types were selected for sugar and acid content, and berries were assessed for: sweetness/sourness, crispness, flavour, and overall acceptability.

DPI-Mildura researcher joins trade mission to Israel

DPI-Mildura researcher Dr Mark Krstic was invited to join a Chamber of Commerce Trade Mission to Israel earlier this year.

At the invitation of the Hon. John Brumby MP, Treasurer of Victoria and Minister for State and Regional Development and Innovation, Mark joined the trade mission to view Israeli technology and innovation in the areas of: irrigation and salinity; wine and table grape production; and olive production.



DPI-Mildura researcher Dr Mark Krstic joined a recent Victorian Government Trade Mission to Israel.

NSW DPI Dareton

T 03 50274409

Citrus Consultation a step towards major Riverlink initiatives

Riverlink Citrus Program Leader Dr Ken Bevington from NSW DPI Dareton was a key organiser of a pilot consultation with the citrus industry on 31 May. The meeting discussed opportunities for major horticultural research initiatives in Sunraysia-Riverland, as part of Riverlink's new Strategic Plan (2005-2010).

Feedback from participants in the consultation has been positive, with similar discussions to be held with other regional industries throughout the remainder of the year.

Focus of the discussion was on long-term drivers for Australian horticultural industries, the challenges they present and opportunities for Riverlink research to assist industry in meeting these challenges.

CSIRO Plant Industry Merbein

T 03 50513100

Spanish student studies water spot

PhD student from the Polytechnic University of Valencia Spain, Pau Blanquer Escribano, is currently in Sunraysia to study water spot on mandarins.



Water spot is a physiological disorder of some mandarin cultivars that occurs after rain. It causes the rind to become unsightly and lowers the value of the fruit. Imperial mandarin, an important local cultivar, is susceptible to water spot.

Sponsored by Palermo University in Italy, Pau is working with Drs Michael Treeby and Richard Storey at CSIRO Merbein, with assistance from staff at NSW DPI Dareton.

In Touch

Information for Riverlink Staff



NEW STAFF

DPI-Mildura

Nicole Dimos - *Viticare Trials Support Officer*

After a stint working casually on this project, Nicole was successful in attaining the position.

Kelly Fyfe - *Research Officer*

Kelly has commenced work in the Catchment and Agriculture Services section of DPI, working on horticultural buffers.

Sue McConnell - *Environment Team Leader*

Sue recently moved from her position as Section Leader of Crop Quality at DPI to take up the Environment Team Leader position in Catchment and Agriculture Services.

CSIRO Plant Industry Merbein

Pau Blanquer Escribano - *Visiting Student*

Pau is working on water spot on mandarins, for his PhD at Polytechnic University of Valencia Spain. Drs Michael Treeby and Richard Storey at CSIRO Merbein are supervising Pau's work, with assistance from Ken Bevington and Graeme Sanderson at NSW DPI Dareton.

Norma Morales - *Technical Assistant*

Norma has commenced work with Peter Clingeffer at CSIRO Merbein.

FAREWELLS

PIRSA/SARDI Loxton

Tim Pitt - *Research Officer and Farm Manager*

Tim has left for extended overseas travel - the Loxton centre hope to welcome him back in a year or so.

DPI-Mildura

Nerida Crothers - *Hons Student VUT*

Nerida completed her Honours project work at DPI-Mildura during May. Nerida's work investigated sun exposure of Chardonnay and its effect on grape and wine quality. She was supervised by Dr Mark Downey.

Nicole Georgeson - *Farm Administration*

Nicole has left DPI-Mildura on maternity leave. We congratulate her on the birth of Jessica Mary on 7 July!

Miriam Yip - *Environment Team Leader*

Miriam has left DPI to study Natural History Film Making at Flinders University. Miriam was the Riverlink Program Leader for Biodiversity.

CSIRO Plant Industry Merbein

The following Technical Assistants to Peter Clingeffer have recently completed their work at CSIRO Merbein:

Karen Connolly

Troy Fry

Peter Howard

Sonia Long

Jodi Rogers

Cathy Ryan

CONGRATULATIONS

Marica Njegovan - *DPI-Mildura*

Marica graduated with Honours from the La Trobe University Science Faculty during April - the only science graduate at the Mildura ceremony! Marica completed her Honours project at DPI, working on the extractability of anthocyanins in red wine grapes. Extra congratulations go to Marica for her impending nuptials!

STUDENT OPPORTUNITY

CSIRO Merbein are still seeking a PhD student to investigate the physiological effects of modern table grape production technologies on grape berry development. Honours degree or equivalent in science, agriculture or a related field is required, and the successful applicant must be eligible for PhD enrolment at La Trobe University, be an Australian Citizen or have Permanent Residence status to be eligible to apply.

Further information is available from Dr Michael Treeby at CSIRO Merbein on 03 50513145 or email michael.treeby@csiro.au

SCIENCE AWARDS - CALLS FOR NOMINATIONS



Awards for scientific excellence for junior and senior researchers

Nominations are invited for the Australian Academy of Science Awards for Scientific Excellence. Both junior and senior researchers are urged to apply for these awards, which recognise outstanding research in the natural sciences. Nominations close 30 August 2005. Information about the awards is available at <http://www.science.org.au/awards>.

For further details contact Nancy Pritchard at the Australian Academy of Science
mailto: nancy.pritchard@science.org.au

ATSE Clunies Ross Award 2006

Nominations are currently invited for the 2006 ATSE Clunies Ross Awards for outstanding scientific achievers. The award is for the successful application of science and technology for the economic, social and environmental benefit of Australia. The ATSE Clunies Ross Award is given to people who have devoted themselves to applying science and technology to create new business, advantage industry and solve community problems.

Nomination forms are available from www.cluniesross.org.au and close on Friday 29th July. Winners will be announced at the Award ceremony dinner in Melbourne on Wednesday 26th April 2006.



DPI researcher Alison MacGregor had fun supervising bridge building at the recent Riverlink sponsored Science and Engineering Challenge.

GENERAL INFORMATION



LTU STUDENTSHIP AVAILABLE

La Trobe University is offering one PhD Scholarship to be taken up at its Mildura Campus. The student will be required to undertake original research in terrestrial ecology under the supervision of Dr Aldo Poiani. The precise nature of the project is negotiable on the basis of the student's interests and the expertise available on campus. The scholarship provides a stipend of \$20,000 pa.

Candidates should send preferred topic for their project, complete curriculum vitae and contact details of two referees to Dr Aldo Poiani, La Trobe University, Mildura Campus, Benetook Ave Mildura Victoria 3500. T (03) 50514003, F (03) 50220043, E a.poiani@latrobe.edu.au. Closing date 18 November 2005.

FIELD DAYS

Thanks to all staff who participated in the Riverlink site at this year's Mildura District Horticultural Field Days in May. We had two sunny days with many visitors resulting in high attendance.



Dr Shelley Rozario from DPI-Mildura had many enthusiastic visitors to her 'Bugs in the Bush' display.

SCIENCE WRITING

Staff from DPI-Mildura recently attended a five day workshop on writing refereed scientific publications run by 'Write Way Consulting'. DPI-Mildura researcher Cathy Taylor said that the workshop provided the opportunity for participants to explore all aspects of science writing for academic journals.

'It was a very good course, very intensive and we actually left with an almost completed paper for submission,' said Cathy. 'I would highly recommend it to anyone who is interested in academic publishing.'

Further information is available from Robert Brown of Write Way Consulting on 07 33454192.